

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

1. (Currently amended) A secondary electrochemical cell with an alkaline electrolyte, the cell containing a non-sintered electrode comprising a two-dimensional conductive support covered in a layer containing ~~an electrochemically active material~~nickel hydroxide and a binder, wherein said binder is a mixture of a cellulose compound and a styrene-acrylate copolymer which is a combination of elementary styrene units (-CH₂CHC₆H₅-), and of elementary acrylic ester or acrylate units (-CH₂CHCOOR-) of general formula: [(CH₂-CHC₆H₅-)_p(CH₂CHCOOR-)_q]_n.
2. (Previously Presented) A cell according to claim 1, in which the proportion of said styrene-acrylate copolymer is less than 4% by weight of said layer.
3. (Previously Presented) A cell according to claim 2, in which the proportion of said styrene-acrylate copolymer lies in the range 0.15% to 3% by weight of said layer.
4. (Previously Presented) A cell according to claim 1, in which said cellulose compound is selected from methylcellulose, carboxymethylcellulose, hydroxypropylmethyl-cellulose, hydroxypropylcellulose, and hydroxyethylcellulose.

5. (Previously Presented) A cell according to claim 1, in which the proportion of said cellulose compound lies in the range 0.1% to 1% by weight of said layer.

6. (Canceled)

7. (Currently Amended) A cell according to claim 16, in which said nickel hydroxide also contains at least one syncrystallized hydroxide of an element selected from zinc, cadmium, and magnesium, and at least one syncrystallized hydroxide of an element selected from cobalt, manganese, aluminum, yttrium, calcium, strontium, zirconium, copper.

8. (Currently Amended) A cell according to claim 16, in which said nickel hydroxide has a spheroidal shape and has a grain size lying in the range 7 μm to 20 μm .

9. (Previously Presented) A cell according to claim 1, in which said layer also comprises a conductive material consisting principally of a compound of cobalt.

10. (Previously Presented) A cell according to claim 9, in which said compound of cobalt is selected from cobalt metal Co, cobalt oxide CoO, cobalt hydroxide Co(OH)₂, the composite oxide of lithium and cobalt LiCoO₂, and an oxide of conductive cobalt oxide of a valency greater than 2.

11. (Previously Presented) A cell according to claim 1, in which said layer also contains at least one other compound selected from the compounds of zinc, yttrium, ytterbium, and calcium.

12. (Previously Presented) A cell according to claim 11, in which said compound is a compound of yttrium.

13. (Previously Presented) A cell according to claim 12, in which said compound of yttrium is selected from yttrium oxide Y_2O_3 and yttrium hydroxide $Y(OH)_3$.

14. (Previously Presented) A cell according to claim 11, in which said compound is a compound of ytterbium.

15. (Previously Presented) A cell according to claim 14, in which said compound of ytterbium is selected from ytterbium oxide Yb_2O_3 and ytterbium hydroxide $Yb(OH)_3$.

16. (Previously Presented) A cell according to claim 1, in which said layer also contains polymer fibers.

17. (Previously Presented) A cell according to claim 1, in which said two-dimensional conductive support is selected from a solid or a perforated strip, an expanded metal, a grid, and a fabric.

18. (Previously Presented) A cell according to claim 1, also comprising a metal-hydride negative electrode.